ALPHA DIAGNOSTIC INTERNATIONAL

Mouse Inducible Nitric Oxide Synthase (iNOS) cDNA Probe:

Cat# iNOS61-D Mouse cDNA probe **Size**: 2 ug

Form: ☐ liquid ☐ lyophilized **Store** at -20°C

The cDNA probe is provided as a double stranded cDNA fragment as lyophilized powder. It can be re-suspended in a desired buffer (50-100ul buffer: 10mM Tris-HCl, pH 7.5, 0.1 mM EDTA). Store isn suitable size aliquots at –20oC for 6-12 months. The probe has 5' overhangs and >98 % purity. The length of the probe is derived from a segment of mouse macrophage inducible nitric oxide synthase (iNOS) gene, which has a length of approximately 1.8 kbp. The probe may be labeled by radioactive or non-radioactive compounds using either random primer labeling or nick translation.

Northern blot analysis reveals an iNOS mRNA with an approximate size of 4.6 kbp in adult rat ventricular myocytes; 4.5 and 4.2 kbp in human retinal tissue; 4.5 kbp in human cerebellum tissue; 4.2 kbp in human skeletal muscle. Murine iNOS is 94% homologous to rat and 80% homologous to human iNOS at the amino acid level.

References:

1. Sessa et al. Molecular cloning and expression of a cDNA encoding endothelial cell nitric oxide synthase. *J. Biol. Chem.* **267**, 15274-15276 (1992)
2. Feinburg and Vogelstein. A technique for radiolabeling DNA restriction endonuclease fragments to high specific activity. *Anal. Biochem.***132**, 6-10 (1983)
3. Koch et al. AN improved method for labeling of DNA probes by nick translation. *Nucleic Acid Res.* **14**, 7132 (1986).
4. Sebi et al. Non Radioactive labeling and detection of nucleic acids III. Application of the digioxigenin system. *Biol. Chem. Hoppe-Seyler* **371**, 939-951 (1990).
5. Kessler et al. Non radioactive labeling and detection of nucleic acids. A novel DNA labeling and detection system based on digioxigenin: Anti-digioxigenin ELISA principle (Digioxigenin system). *Biol. Chem. Hoppe-Seyler* **371**, 916-927 (1990).
6. Park et al. Constitutive expression and structural diversity of inducible isoform of nitric oxide synthase in human tissues. *Life Sci.* **59**, 219-225 (1996).

These materials should be used for In Vitro Research Use and Manufacturing Only.

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